

## **Attachment B**

### Pre Katrina Demographics and Future Workload Projections VA Medical Center, New Orleans

#### **1. Pre Katrina and VA's Capital Asset Realignment for Enhanced Services (CARES) Demographics**

The CARES process created a mechanism to address access and capacity gaps in the delivery of health care services for veterans through the creation of "market areas" for planning purposes. CARES defines guidelines for providing enrolled veterans' access to hospital and primary care. Access gaps are calculated at the market level by determining the percent of enrollees living in each market that are within driving time guidelines provided in the table below to primary, hospital and tertiary care.

Guidelines	Urban	Rural	Highly Rural
Primary Care	30 minutes	30 minutes	60 minutes
Inpatient Hospital Care (Med/Surg/Psychiatry)	60 minutes	90 minutes	120 minutes
Specialty Hospital Care	3-4 hours	3-4 hours	Within the VISN

CARES also defines the market's ability to meet projected demand for inpatient and outpatient services using bed days of care converted to the number of beds for inpatient services and clinical episodes (visits), referred to as clinic stops, for outpatient services. The difference between the supply (availability of medical services) and demand (number of patients seeking care) through 2023 were addressed as part of the National CARES Plan and are referred to as access gaps or gaps.

In the CARES Plan the most relevant market area for New Orleans is the "Central Southern" Market Area (Southern Louisiana and Southern Mississippi). CARES projections (which were based on the guidelines in the table above) did show a decline in demand through 2023. These projections are provided in the table and although a decline is evident, the numbers were projected to remain high for some time into the future.

	Fiscal Year				% Change between 2005 & 2023
	2005	2008	2013	2023	
VA Central Southern Region	376,882	364,641	343,757	307,431	-18.4%

#### Enrollment-Veteran Population Projections

These statistics were clearly more reliable prior to the hurricanes and although difficult to predict, the downward trend could increase due to failure of veterans to return to the region (2/3rds of VA patients were evacuated to other VA VISN 16 Hospitals). Although the overall veteran population is projected to decline, the female veteran population and veterans greater than 85 years old is expected to increase so the patient mix is likely to skew toward those needing more frequent/intensive care. This trend is consistent throughout VA and reflects the aging of the veteran population and the increasing number of females serving in the military. There is also the potential for an increase in utilization due to loss of employment/income as well as the scarcity of medical services in the area (the area around New Orleans has historically been among those designated as "medically underserved"). In attempting to predict veteran utilization trends economic factors are also important to consider.

US Department of Commerce data from 2004 indicate that a high percentage of counties in VA's Central Southern Market area had a per capita income below \$25,000. Due to low income and scarcity of medical resources, veterans in this area tend to rely on VA for their health care – this trend is likely to continue regardless of the numbers of "returning" veterans since the devastation wrought by hurricanes Katrina and Rita will likely cause per capita income in the region to remain low.

Prior to Katrina projections for two critical "parishes", Orleans and St. Bernard, also showed a decline. Within Orleans Parish (see map to the right) the veteran population by 2023 was projected (by CARES) to decline by 39%. Within St. Bernard Parish to the south the veteran population by 2023 was projected to decline at half that rate - but from a much smaller base (only 14% of Orleans population).

However, although the overall veteran population was projected to decline, CARES (using the guidelines in the table above) projected an increase in demand for hospital level services due to increases in the population to the North and West of Lake Ponchartrain and anticipated changes in the "mix" of veterans (an aging population). Inpatient demand in this area was projected to increase by 20% with a commensurate increase in specialty services. **CARES estimates prior to Katrina therefore, supported the continued presence of a VA Medical Center in New Orleans.** What has changed is the impact of Katrina – and that, for the most part, is confined to changes in projections for the **flooded areas** (Orleans and St. Bernard Parishes). The **critical variable** for justifying the re-establishment of a VA Medical Center in New Orleans, therefore, **is the number of veterans who will return after having been displaced by Katrina.** The next section provides estimates for this particular subset of total veteran users.



## 2. Impact of Hurricane Katrina

The shaded area of the top section of the figure below shows the extent of flooding in Orleans Parish as of September 11, 2005. The bottom section of the figure shows this same area overlaid with the address locations for registered users of the VA Medical Center in New Orleans.



Many of these areas were flooded due to heavy rains in areas that have flooded frequently in the past. Heavy persistent flooding due to levy failures and floodwall over-topping mainly involved Orleans and St. Bernard Parishes.

Addresses are noted only in towns where flooding occurred. The red shaded areas indicate extensive flooding in the New Orleans metropolitan area only.



Clearly a large number of veterans were among those impacted by flooding. These registered users (those living in areas that were flooded) accounted for approximately 39% of the total users of the New Orleans VA Medical Center prior to Katrina. Within Orleans Parish 31 % of veteran users resided in heavily flooded areas. A higher percentage (90%) of St. Bernard Parish veteran users were flooded. Population wise St. Bernard Parish is only 14% the size of the Orleans Parish (462,269 vs. 65,554). Based on these data a significant number of users were impacted and most are assumed to have departed the area. Some of these displaced individuals will return to New Orleans and some will settle where they evacuated.

## 3. Post Katrina and Future Estimates – Orleans and St. Bernard Parishes

With respect to Pre-Katrina CARES projections Orleans Parish accounted for 24% of the projected 2023 beds and 24% of the projected 2023 outpatient stops. St. Bernard Parish was projected to account for

less than 4%. Assuming flooding impacts future veteran population proportionately, **11.4%** of the CARES future demand was **projected** to come from heavily flooded areas (24% x 31% in Orleans Parish, and 4% x 90% in St. Bernard Parish).

The ratio of population change between Orleans Parish and the rest of the VA New Orleans Primary Service Area (PSA) was accelerated by hurricane Katrina and will result in shifts to the North Shore (for example Slidell) and west to Metairie, Kenner, and Baton Rouge. Recent published projections predict Orleans Parish population returning to 60 % of pre storm levels. **For the purposes of this analysis the VA assumes this percentage will also apply to returning veterans.**

There are recent indications that many of those who departed the flooded area did not go far. For example the number of applicants for FEMA assistance (which includes more than just flooding victims) in the New Orleans-Metairie-Kenner area was 281,006 - the number in the Baton Rouge area was 202,042 (data source is FEMA). For comparison purposes the pre-storm population of Orleans and St. Bernard Parishes was 527,000. A large number (and percentage) of evacuees, therefore, remained within 100 miles of the New Orleans metropolitan area – it is assumed that a large number of VA users are among this group. It is further assumed that most will remain in the area.

If the above assumption is correct and 60% of VA users return to Orleans and St. Bernard Parishes, **there will be minimal impact on the demand for VA services.** Under this scenario, there will be a less than 10% decrease in total 2023 demand - which still represents an increase over Pre-Katrina demand. This scenario does not account for population shifts to areas outside of Orleans Parish which would further mitigate workload reductions. The above analysis provides further support for re-establishing a medical center in the New Orleans area.

#### **4. Post Katrina and Future Estimates – The Extended Catchment Area**

The VA requested assistance from the actuarial firm Milliman, Inc. to conduct a demographic analysis of the more extensive catchment area in the coastal area affected by the hurricanes. Their 12 page report is included as Annex B1 and has several important conclusions. Among them are:

*"It is not anticipated that Long-term Enrollment Rates in the New Orleans areas will change; however, once New Orleans is rebuilt, veterans may have a higher propensity to enroll. Possible reasons for this are that the VA facility in New Orleans may be extremely convenient to the returning veteran population; the health care system in New Orleans may not be replaced as quickly as the VA system; or the new VA facility may be "state-of-the-art" and attract new veterans."*

*"Finally, for the same reasons discussed above, Enrollee Reliance on VA health care is also not expected to change significantly."*